Polymak®

ANGLE GRINDER

100mm

INSTRUCTION MANUAL

Polymak®

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Read and follow all safety precautions in instruction manual.

PMAG4-750B ANGLE GRINDER SPARE PARTS LIST

No	Name Of Parts	Unit	Qty
1	wheel guard	Pcs	1
2	Out Flange	Pcs	1
3	Inner Flange	Pcs	1
4	Spindle	Pcs	1
5	Key 3*10	Pcs	1
6	Scraper seal	Pcs	4
7	Screw M4*14	Pcs	4
8	Screw Washer	Pcs	4
9	Screw Washer	Pcs	1
10	Bearing 6201-2RS	Pcs	1
11	Gear Box Cover	Pcs	1
12	O Ring	Pcs	1
13	Big Gear	Pcs	1
14	Elastic Ring 12	Pcs	1
15	Needle Bearing HK0808	Pcs	4
16	Self-Lock Pin	Pcs	1
17	Screw ST4*20	Pcs	1
18	Lock Pin Spring	Pcs	1
19	Lock Pin Cap	Pcs	1
20	Gear Box	Pcs	1
21	Lock nut M6	Pcs	1
22	Pinion	Pcs	1
23	Bearing 629-2RS	Pcs	1
24	Bearing Shim	Pcs	1
25	Bearing Gland	Pcs	1
26	Screw M4*10	Pcs	3
27	Armature	Pcs	1
28	Wind Circle	Pcs	1
29	Ring	Pcs	1
30	Bearing 627-2RS	Pcs	1
31	Bearing Sleeve	Pcs	1
32	Screw ST4*70	Pcs	1
33	Field Coil	Pcs	1
34	Nameplate	Pcs	1
35	Plastic Housing	Pcs	1
36	Brush Yoke	Sets	2
37	Carbon Brush	Sets	2
38	Field Coil Spring	Pcs	2
39	Screw ST3*10	Pcs	2
40	Screw ST4*14	Pcs	3
41	Strain Rellef	Pcs	1
42	Line Bank	Pcs	1
43	Switch	Pcs	1
44	Housing Cover	Pcs	1
45	Cord Guard	Pcs	1
46	Cable	Pcs	1
47	Spanner	Pcs	1

SPECIFICATIONS:

Model	PMAG4-750B
Rated voltage/Frequency	220V/50Hz
Input Power	750W
No Load speed	11000r/min
Disc Diameter	Φ100mm
Accessories	Carbon brush 2pcs Special Wrench 1pc Side Handle 1pc wheel cover 1pc Operation Manual 1pc Warranty card 1pc

. Manufacturer reserves the right to change specifications without notice.

. Specifications may differ from country to country.

GENERAL SAFETY RULES

(For All Tools)

WARNING:

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and / or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

1. **keep your work area clean and well it.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids、gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders、children、and visitors away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

4. Power tool plugs must match the outlet. Never modify the plugs in any way .Do not use any adapter plugs with earthed power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** These is a increased risk of electric shock if your body is grounded.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet.** Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cord increase the risk of electric shock.
8. **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce the risk of electric shock.

PERSONAL SAFETY

9. **Stay alert, watch what you are doing and use common sense when operating a power**

tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

10. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes , jewelry, or long hair can be caught in moving parts.

11. **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

12. **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

13. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

14. **Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.** Ordinary eye or sun glasses are NOT eye protection.

TOOL USE AND CARE

15. **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.

16. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

17. **Do not use tool if switch does not turn it on or off**. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

18. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.

19. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

20. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.

21. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation**. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

22. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.

SERVICE

23. **Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.**

24. **When servicing a tool, use only identical replacement parts.** Follow instructions in the Maintenance section of the manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electric shock or injury.

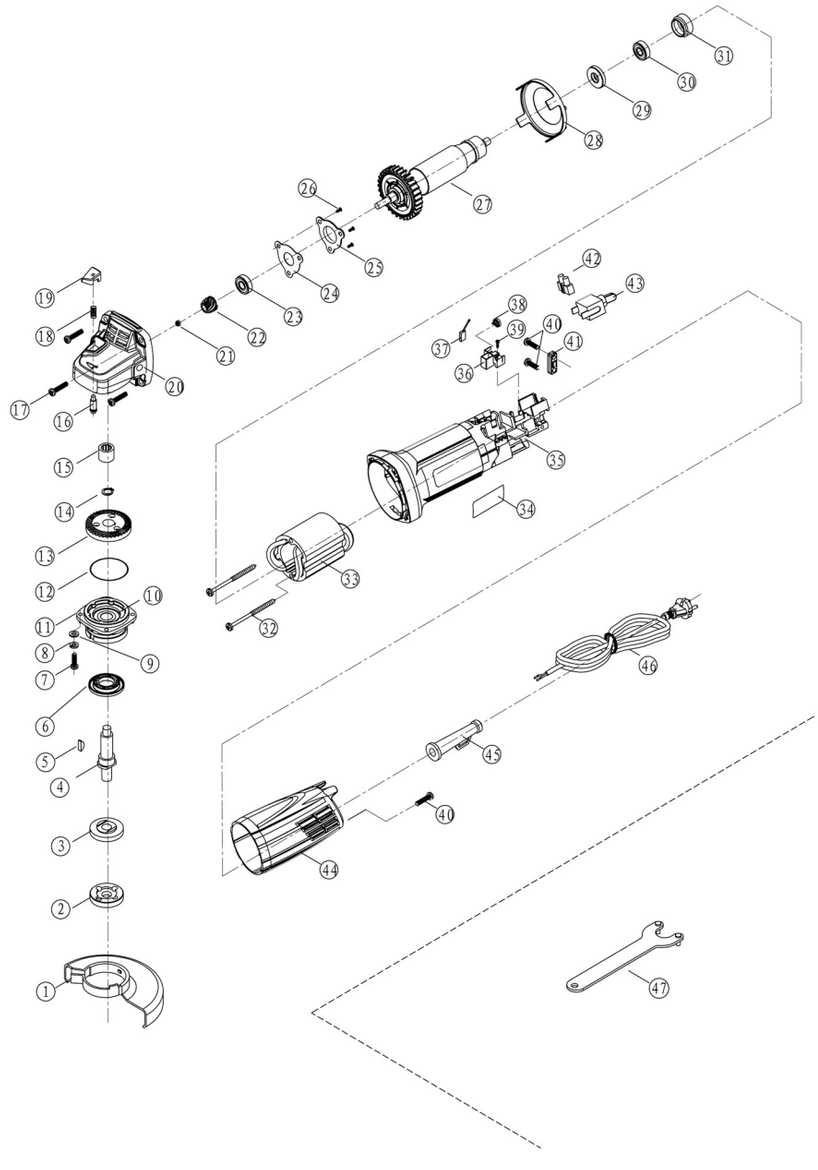
SPECIFIC SAFTETY RULES

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to grinder safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

1. **Always use proper guard with grinding wheel.** A guard protects operator from broken wheel fragments.

2. **Accessories must be rated for at least the speed recommended on the tool warning label.** Wheels and other accessories running over rated speed can

PMAG4-750B ANGLE GRINDER



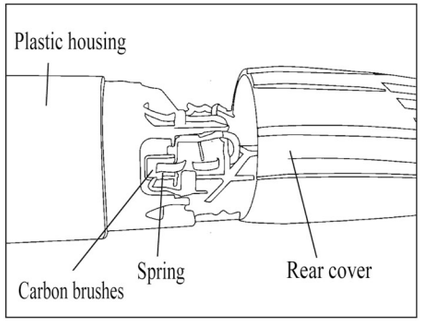


Fig7

◆ **Maintenance & Daily care.**

⚠CAUTION:

Always be sure that the tool is switch off and unplugging before attempting to perform inspection and maintenance.

1. The tool and its air vents have to be keep clean, regularly clean the tool's air vents or whenever the vents start to become obstructed
2. Usually check the all screws if be loosened or not periodically
3. Usually check the cord insulation if broken or not.

◆ **Replacing carbon brushes**

When operating, if there is big sparks or the machine stops suddenly, then the carbon brushes should be replaced. Unscrew the rear cover then open the machine. Then remove the spring, take out the worn carbon brushes and insert new ones. And make sure the carbon brushes can make movement freely. Then put back the spring and close the body and secure its screw. (Fig 7)

⚠CAUTION:

Be sure to re-install the knob after inserting new carbon brush.

After replacing brushes, plug in the tool and break in brushes by running tool with no load for about 10 minutes. Then check the tool while running, when releasing the switch trigger. If the tool is not working well , ask your local POLYMAK service center for repair.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by POLYMAK Authorized or Factory service centers, always using POLYMAK replacement parts.

Fly apart and cause injury.

3. **Hold tool by insulated gripping surfaces when performing and operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
4. **When using depressed center grinding wheels, be sure to use only fiberglass reinforced wheels.**
5. **Always use safety glasses or goggles. Ordinary eye or sun glasses are NOT safety glasses.**
6. **Check the wheel carefully for cracks or damaged before operation.** Replace cracked or damaged wheel immediately. Run the tool (with guard) at no load for about a minute, holding tool away from others. If wheel is flawed, it will likely separate during this test.
7. **Use only flanges specified for this tool.**
8. **Be careful not to damage the spindle, the flange (especially the installing surface) or the lock nut**. Damage to these parts could result in wheel breakage.
9. **NEVER use tool with wood cutting blades or other sawblades.** Such blades when used on a grinder frequently kick and cause loss of control leading to personal injury.
10. **Hold the tool firmly.**
11. **Keep hands away from rotating parts.**
12. **Make sure cord is clean of wheel.** Do not wrap cord around your arm or wrist. If control of tool is lost, cord may become wrapped around you and cause personal injury.
13. **Make sure the wheel is not contacting the worpiece before the switch is turned on.**
14. **Before using the tool on an actual workpiece, let it run for a while**. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced wheel.
15. **Use the specified surface of the wheel to perform the grinding.**
16 **Watch out for flying sparks.** Hold the tool so that sparks fly away from you and other persons or flammable materials.
17. **Do not leave the tool running**. Operate the tool only when hand-held.
18. **Do not touch the workpiece immediately after operation; it may be extremely not and could burn your skin.**
19. **ALWAYS wear proper apparel including long sleeve shirts. Leather gloves and shop aprons to protect skin from contact with not grindings.**
20. **Use of this tool to grind or sand some products. Paints and wood could expose user to dust containing hazardous substances. Use appropriate respiratory protection.**

SAVE THESE INSTRUCTIONS

WARNING:

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS

The following show the symbols used for the tool.

V----------voltage

A----------ampere

Hz----------hertz

n。 ---------- no load speed.

--/min---------- revolutions or reciprocation per minute

⧈ --------class II construction

FUNCTIONAL DESCRIPTION

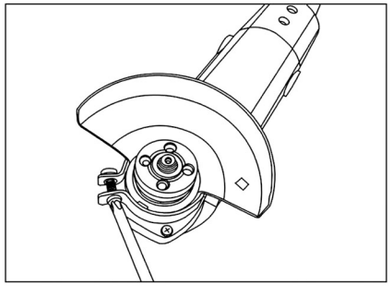


Fig1

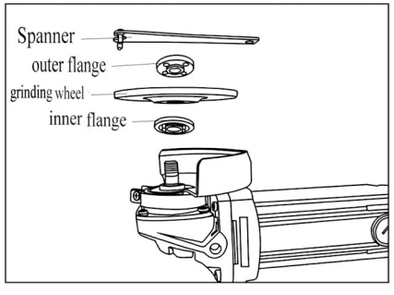


Fig2

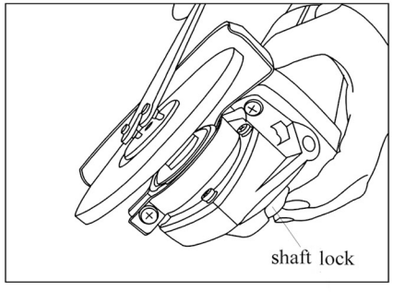


Fig3

■ Operation instructions:

◆ Wheel Guard

Please aim the convex end of the wheel guard to the slot mouth of the front cover, and then rotate the guard body to 180 degree, finally tighten the fastening screw (Fig1)

In addition, you can get the desired position by rotating the guard body according to the need of operation.

◆ Installing or removing grinding wheel

⚠CAUTION:

• When using an abrasive cut-off wheel, be sure to use only the supplied wheel guard , inner flange, lock nut designed for use with cut-off wheels.

1. Mount the inner flange onto the spindle, Fit the wheel/disc on the inner flange and screw the outer flange onto the spindle (Fig 2).
2. To tighten the outer flange, Press the shaft lock firmly so that the spindle cannot revolve, then use the lock nut wrench and securely tighten clockwise. (Fig 3)
3. To remove the wheel, follow the installation procedure in reverse.

※ NOTICE:

The groove of INNER FLANGE must align the flatness of spindle when you install the wheel and then tighten enough.

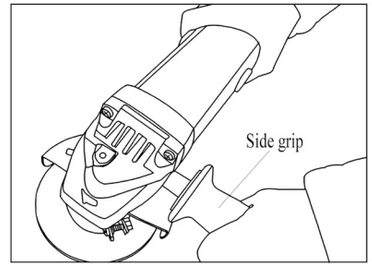


Fig 4

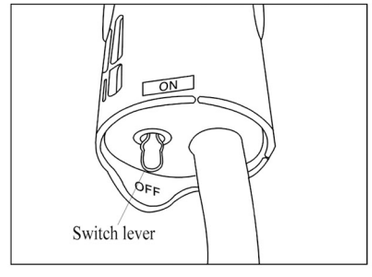


Fig5

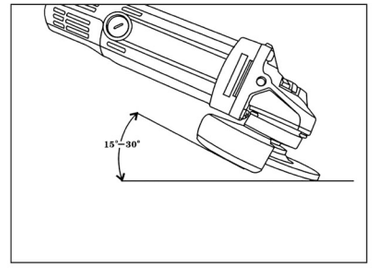


Fig6

◆ Side grip

⚠Caution:

Always be sure that the side grip is installed securely before operation.

The both sides of tool's head designed two screw holes to assemble the grip side.

Screw the side grip securely on the position of the tool as shown in the figure 4.

Hold the side grip firmly by hand you will control the tool better.

◆ Switch action

⚠Caution:

Before plugging in the tool, always double check the shaft lock in the "off" position, Switch can locked in "ON" position for ease of operator comfort during extended use , Apply caution when locking tool in "ON" position and maintain firm grasp on tool.

To start the tool, Slide the switch lever toward the "I(ON)" position and can continue to run.

To stop the tool, Slide the switch lever toward "0(OFF)" position. (Fig5)

◆ Effective and safe for Grinding and sanding operation.

Always hold the tool firmly with one hand on housing and the other on the side handle, turn the tool on and them apply the wheel or disc to the workpiece.

1. The users can get satisfied effects if the users give 1/2 strength compared with the own weight of the tool. Over strength is easy to make the tool engine and abrasive wheel damaged because of overload.
2. Generally speaking, please keep the grinding and cutting part of the wheel and disc in the scope of 15 to 30 degree with the surface of processing object. (Fig 6)
3. In general operation, should start first then work, In reverse should leave workpiece then stop.